Appl. No.: 09/478,567

Amdt. dated 01/21/2005

Reply to Office action of October 21, 2004

Amendments to the Claims:

(currently amended) A nucleic acid molecule comprising a nucleotide sequence 1. which encodes an engineered $VSP\alpha$ or $VSP\beta$ protein comprising an amino acid sequence which differs from the amino acid sequence of a native protein, wherein said engineered protein has an altered amino acid composition in comparison to said native protein, wherein said altered amino acid composition comprises an increase in essential amino acid content to at least 5% to 10% of the amino acid content of said engineered protein, and wherein said engineered protein binds to at least one antibody, monoclonal antibody, or antibody fragment, or protein which binds to said native protein, wherein said native protein is $VSP\alpha$ or $VSP\beta$ as set forth in SEQ ID NO:1.

- 2. (previously presented) The nucleic acid molecule of claim 1, wherein said altered amino acid composition comprises an increase in essential amino acid content to at least 10%.
- (currently amended) The nucleic acid molecule of claim 1 wherein said altered 3. amino acid composition comprises an increase in the content of an essential amino acid [[is]] selected from the group consisting of methionine, tryptophan, lysine, leucine, isoleucine, and eysteine valine.
 - (canceled) 4.
- 5. (previously presented) A transformed plant containing within its genome the nucleotide sequence of Claim 1.
- (original) A transformed plant containing within its genome the nucleotide 6. sequence of Claim 3.
 - 7. (previously presented) The plant of claim 5, wherein said plant is a monocot.

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- (currently amended) A stably transformed plant having inserted into its genome a 8. nucleotide sequence which encodes an engineered $VSP\alpha$ or $VSP\beta$ protein comprising an amino acid sequence which differs from the amino acid sequence of a native protein, wherein said engineered protein has an altered amino acid composition in comparison to said native protein, wherein said altered amino acid composition comprises an increase in essential amino acid content to at least 5% to 10% and wherein said engineered protein binds to at least one antibody, monoclonal antibody, or antibody fragment, or protein which binds to said native protein, wherein said native protein is $\frac{VSP\alpha \text{ or }VSP\beta}{}$ as set forth in SEQ ID NO:1.
- 9. (previously presented) The plant of Claim 8, wherein said altered amino acid composition comprises an increase in essential amino acid content to at least 10%.
- (currently amended) The plant of Claim 8, wherein said altered amino acid 10. composition comprises an increase in the content of an essential amino acid selected from the group consisting of methionine, tryptophan, lysine, leucine, isoleucine, and eysteine valine...
- (previously presented) The plant of Claim 8, wherein said altered amino acid 11. composition comprises an increase in methionine content to at least 10%.
 - 12. (canceled)
 - 13. (canceled)
 - 14. (original) The plant of Claim 8, wherein said plant is a dicot.
 - (original) The plant of Claim 8, wherein said plant is a monocot. 15.

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- 16. (original) The plant of Claim 15, wherein said monocot is maize.
- 17. (previously presented) The plant of Claim 14, wherein said dicot is soybean.
- 18. (previously presented) A transformed seed of the plant of Claim 8.
- 19. (previously presented) A transformed seed of the plant of Claim 15.
- 20. (previously presented) A transformed seed of the plant of Claim 16.